STYLOCHUS AOMORI, A NEW POLYCLAD FROM NORTHERN JAPAN

KOJIRO KATO （加藤 光次郎）

Mitsui Institute of Marine Biology, Susaki near Simoda, Idu

THREE FIGURES

(Received February 7, 1937)

Thanks to the kindness of Mr. Hayao Satô of the Tôhoku Imperial University, I have recently had the opportunity of examining numerous alcoholic specimens of a *Stylochus*, which were collected in July, 1935, on the muddy beach at Asadokoro near Asamusi, Aomori Prefecture. According to Mr. Satô the planarian in question appears fairly common in that locality and is often found in the burrow of *Gebia major*. On closer examination it seems to me new to science and is named as follows:

Stylochus aomori sp. nov.

The body is oval in shape, slightly thick in the central parts and thins out toward the margin. The larger specimen measures 20 mm by 13 mm. The color of the dorsal surface is light grayish brown with a large number of dark patches and spots which are less crowded along the margin of the body. The ventral surface is paler.

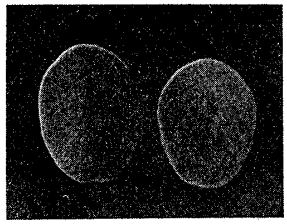

Fig. 1. Dorsal (left) and ventral (right) views of *Stylochus aomori* sp. nov. ×1.

A pair of the tentacles are situated at the hind end of the first sixth of the body. They are free from pigment, of short conical shape and have numerous eye-spots in them. The cerebral eye-spots, about 100 in number, are separated into two clusters by the median line. The frontal eye-spots are very sparsely distributed and the marginal ones are densely arranged along the anterior half of the body.

The epidermis is composed of the ciliated columnar cells which contain a considerable number of spindle-shaped rhabdites. The dermal

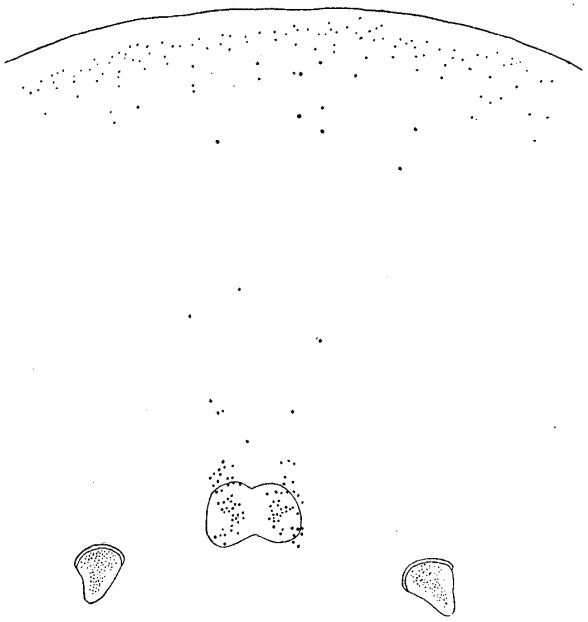

Fig. 2. Arrangement of eye-spots of *Stylochus aomori*. ×16.

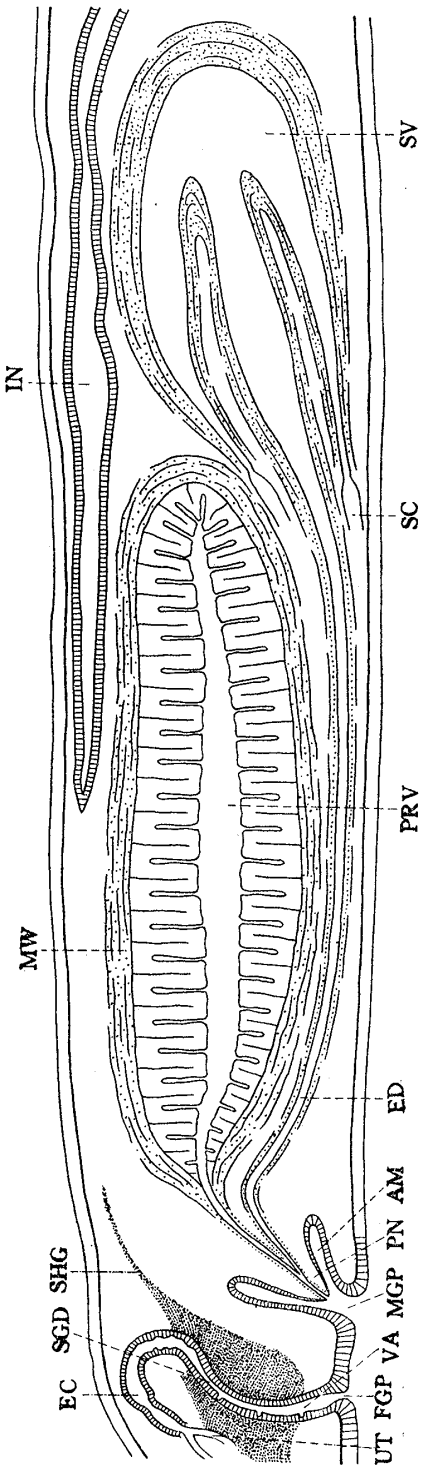

Fig. 3. Longitudinal section through genital organs of *Stylochus aomori*, schematized. ×60. AM antrum masculinum; EC egg-canal; ED ejaculatory duct; FGP female genital pore; IN intestine; MGP male genital pore; MW muscular wall; PN penis; PRV prostate vesicle; SC seminal canal; SGD shell gland duct; SHG shell gland; SV seminal vesicle; UT uterus; VA vagina.

musculature is made up of the outer thin circular muscle layer immediately beneath the basement membrane, the middle longitudinal layer of a moderately thickness and the inner well-developed circular layer. Another innermost thick longitudinal layer is present only on the ventral side.

At the posterior extremity of the second fifth of the body, lies a mouth which leads into the pharyngeal chamber at its center. The pharynx holds about three-eighth the entire length of the body and is provided with seven pairs of lateral folds. The main intestinal trunk runs along the median line, giving off numerous lateral branches.

The genital pores are situated at the anterior extremity of the last twelfth of the body and are closely approximated with each other. The testes are distributed on the ventral side and the ovaries on the dorsal. Taking a caudal course the seminal canals turn abruptly anteriad near the genital pore and soon continue respectively to the lateral lobes of the seminal vesicle, which is a large anchor-shaped organ surrounded by a thick muscular wall. The medial prong of the seminal vesicle gradually narrows posteriad to assume the character of an ejaculatory duct which runs for a long distance along the ventral side and after receiving the efferent duct of the prostate halfway in the muscular conical penis, opens at the tip of the latter. The prostate vesicle is a large cylindrical muscular organ, lined with the richly folded epithelium which forms a large number of radial chambers arranged very regularly. Embedded in the parenchyma around the muscular wall of the prostate are numerous extracapsular prostate glands, the outlets of which perforate the musculature to open into the lumen. The penis is destitute of spines or stylets and is subvertically disposed in the small antrum masculinum.

Situated immediately behind the male genital pore, the female one leads dorsally into the narrow vagina which is connected with the shell gland duct. The latter curves a little anteriad to pass into the egg-canal which abruptly turns posteriad and receives two uteri at the end. The uteri run forwards along either side of the median line to near the anterior end of the pharynx.

In general respect of the genital organs, the present species agrees fairly well with the type of the genus. However, the possession of a large cylindrical prostate vesicle and the arrangement of cerebral eye-spots are the features characteristic of this species.